

REMARKS**INTRODUCTION:**

In accordance with the foregoing, elected claims 2, 4, 8-12, 29, 30, and 32-39 have been amended, and withdrawn claims 5-7 have been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 2-40 are pending, and claims 2-4, 8-17, 22-24, 29, 30, and 31-40 are under consideration. Reconsideration is requested.

REJECTION UNDER 35 U.S.C. §112:

In the Office Action at page 2, the Examiner rejects claims 4, 8, 9, 11-13, 29, 30, 32, 33, 36 and 37 under 35 U.S.C. §112, first paragraph, as not being supported by the specification. This rejection is respectfully traversed and reconsideration is requested.

In establishing the rejection of claims 4, 11, 33, and 37, the Examiner asserts that there is no support in the specification for the phrase "the first solvent is less than 30% by weight of the electrolyte" as previously recited in claims 4, 11, 33, and 37. As a point of clarification, claims 4, 11, 33, and 37 have been amended to replace the term "weight" with "volume" consistent with the disclosure in at least paragraph 0023 of the instant application.

Generally, in order to establish a prima facie case for a rejection under 35 U.S.C. §112, first paragraph, the Examiner must provide evidence as to why one of ordinary skill in the art would believe that the disclosure does not reasonably convey to the artisan that the inventor had possession at that time of the later claimed subject matter. E.g., In re Alton, 37 USPQ2d 1578 (Fed. Cir. 1996) (prima facie case established by specifically pointing out which example in the specification does not support the claims), In re Gosteli, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) (prima facie burden met where Examiner pointed out numerous differences between claimed subject matter and the written description). In addition, the mere fact that the words used in the claims are not used in the specification *in haec verba* by using the same words does not necessarily mean that the specification does not describe the subject matter of the invention. MPEP 2163.02. It is respectfully submitted that there is insufficient evidence of record as is required to maintain a prima facie rejection of these claims under 35 U.S.C. §112, first paragraph.

Additionally, it is noted that the Examiner has taken the phrase out of context with the remaining features of the claims. By way of example, claim 4 further recites that the electrolyte contains a second solvent that "is roughly between 80% and about 60% by volume of the

electrolyte." As such, it is respectfully submitted that these amounts relative to a total volume of the electrolyte are consistent with the disclosed examples such that the phrase "less than 30%" in the context of the claim 4 is compliant with 35 U.S.C. §112, first paragraph.

In order to clarify this feature without narrowing the scope of the claim as would have been understood by one of ordinary skill in the art, claims 4, 11, and 12 have been amended to reflect the recited amounts of the other solvent in the electrolyte.

Similarly, claims 32 and 33 depend from claim 10, which is not rejected under 35 U.S.C. §112, first paragraph, and recites, among other features, that "the first solvent is roughly between 20% and 40% by volume of the electrolyte," and that "the second solvent is roughly between 80% and about 60% by volume of the electrolyte." Since the recited first solvent being less than 30% and the second solvent being more than 70% are within these ranges, it is respectfully submitted that claims 32 and 33 are compliant with the requirements of 35 U.S.C. §112, first paragraph due at least to their depending from claim 10.

For at least similar reasons, it is respectfully submitted that claims 8, 9, 11-13, 29, 30, 36 and 37 are deemed compliant with the requirements of 35 U.S.C. §112, first paragraph.

In the Office Action at page 3, the Examiner rejects claims 2, 3, 10, 14-17, 22-24, 34, 35, and 38-40 under 35 U.S.C. §112, second paragraph, since the terms "roughly" or "substantially" are vague and indefinite. This rejection is respectfully traversed and reconsideration is requested.

As a general principle, 35 U.S.C. §112, second paragraph, requires that the claims be written such that, in light of the available prior art and the embodiments in the specification, one of ordinary skill in the art would understand the metes and bounds of the invention with a reasonable degree of precision. As such, claims that otherwise appear indefinite when read in a vacuum can be made definite upon review of the prior art and the specification. It is only when, in light of the prior art and the specification and given their broadest reasonable meaning under normal rules of claim construction, a recited term remains unclear to one of ordinary skill in the art that the claim term is said to be indefinite for the purposes of 35 U.S.C. §112, second paragraph. MPEP 2173.02 (2004). For instance, a claim term is indefinite where a meaning can have conflicting results, causing confusion to the person of ordinary skill in the art. MPEP 2173.03. Therefore, in order to establish a prima facie case of indefiniteness, the Examiner needs to provide evidence that a claim limitation, given the broadest reasonable interpretation in view of the specification and the prior art as understood by one of ordinary skill in the art, would be sufficiently unclear as to not allow the person of ordinary skill in the art to understand the metes and bounds of the claim. MPEP 2173.02.

Moreover, as noted in MPEP 2173.05(b), broad terms of approximation such as "substantially" have been found to be compliant with 35 U.S.C. §112, second paragraph, such that "[t]he fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph." As further explained in MPEP 2173.05(b), the "[a]cceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification." As such, in order to establish a prima facie rejection of terms of degree such as "substantially" or "roughly," there needs to be evidence that one of ordinary skill in the art would be unable to discern what is claimed since the use of such broad terms, in and of itself, is insufficient to render a claim indefinite.

Since the Examiner has not provided such evidence or provided such an analysis in the context of the claimed invention, it is respectfully submitted that there is insufficient evidence of record as is required to reject claims 2, 3, 10, 14-17, 22-24, 34, 35, and 38-40 under 35 U.S.C. §112, second paragraph, and that these claims remain compliant with the requirements of 2, 3, 10, 14-17, 22-24, 34, 35, and 38-40.

REJECTION UNDER 35 U.S.C. §102:

In the Office Action at pages 3-4, the Examiner rejects claims 4, 8, 9, 11-13, 29, and 30 under 35 U.S.C. §102 in view of Yamamoto et al. (Japanese Patent Publication No. 7-335254). This rejection is respectfully traversed and reconsideration is requested.

By way of review, Yamamoto et al. discloses a lithium secondary battery using a negative electrode with an active material of carbon. The Examiner states on page 4 of the Office Action that, since the feature of a lithium-sulfur battery is only recited in the preamble, the claim has been interpreted without giving patentable weight to the active materials of lithium and sulfur.

Claim 4 has been amended to clarify that the lithium and sulfur are to be accorded patentable weight by positively reciting the lithium-sulfur battery elements in the body of the claim. As such, consistent with the Examiner's objection to claim 10 on page 4 of the Office Action, it is respectfully submitted that Yamamoto et al. does not disclose or suggest the invention recited in claim 4.

For at least similar reasons, it is respectfully submitted that the Yamamoto et al. does not disclose or suggest the invention recited in claims 11 and 12.

Claims 8, 9, 13, 29 and 30 are deemed patentable due at least to their depending from corresponding claims 4 and 12.

STATUS OF CLAIMS NOT REJECTED:

On page 4 of the Office Action, the Examiner indicates that claims 10, 22-24, and 31 would be allowable if the rejection in view of 35 U.S.C. §112 is overcome. Additionally, since claims 2, 3, 10, 14-17, 22-24, 34, 35, and 38-40 are not rejected under 35 U.S.C. §102 or §103, it is respectfully submitted that these claims are also allowable if the rejection in view of 35 U.S.C. §112 is overcome.

CONCLUSION:

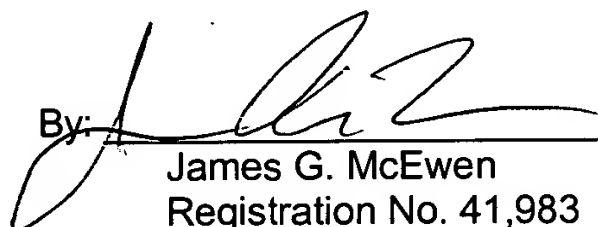
In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any additional fees associated with the filing of this Response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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